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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,884	08/06/2001	Michael Kenny	259/079	7035

34055 7590 06/09/2003

PERKINS COIE LLP
POST OFFICE BOX 1208
SEATTLE, WA 98111-1208

EXAMINER

EL ARINI, ZEINAB

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 06/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,884

Applicant(s)

KENNY ET AL.

Examiner

Zeinab E. EL-Arini

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30,35-37 and 39-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30,35-37 and 39-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

The amendment and remarks filed April 21, 2003 have been acknowledged and entered.

Claims 1-30, 35-37, and 39-41 are pending.

The rejection under 35 USC. 112 second paragraph stated in paper No. 7 has been withdrawn in view of applicants' amendment.

The obviousness- type double patenting rejection stated in paper No. 7 is maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-10, 13-17, 22-27, 37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuoka et al..

Claims 5, 11-12, 18-21, 28-30, and 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuoka et al. in combination with Bergman, Koizumi et al., Matthews and Kosofsky et al.

These rejections stated in paper No. 7 are maintained.

Claims 1-2, 5-12, 16, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al. (5,749,975) new reference in combination with Matsuoka et al.

Li et al. teach a process for cleaning wafer surface. The process comprising forming a film of a heated liquid on the workpiece; and exposing the film surface to ultraviolet radiation in an atmosphere containing a cleaning agent, such as ozone. The reference does not teach directing a liquid jet to dislodge a contaminant on the workpiece, the rotation, the liquid (claims 9, 10), and the rate of rotation as claimed. See the document in general.

Matsuoka et al. as discussed supra in paper No. 7 teaches a method for cleaning substrate. The reference teaches spraying the substrate with a liquid to dislodge the contaminant, rotating the substrate, and the rate of rotation as claimed. See the document in general.

It would have been obvious for one skilled in the art to use the spraying and rotating steps taught by Matsuoka et al. in the Li et al. process to improve the cleaning process by removing the contaminant from the surface. This is also because it is well known in the art to use spraying solution to remove residues or contaminant from a surface.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA

1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-2, 5, 7-10, 16, 25-27, 35, 37, and 40-41 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 81-85 of U.S. Patent No. 6,240,933. Although the conflicting claims are not identical, they are not patentably distinct from each other because the process as claimed is functionally equivalent to the process as claimed in 6,240,933 Patent.

Response to Arguments

Applicant's arguments filed 4/21/03 have been fully considered but they are not persuasive. Applicants argue that Matsuoka et al. teach spraying ultra- pure water onto a substrate, and not directing a liquid jet or jet of steam. Applicants' argument is unpersuasive because on page 3, lines 49- 51, Matsuoka et al. disclose directing jet of the ozone – containing solution to the surface to be cleaned. This is also because "spray" means a jet of fine particles of liquid discharged from an atomizer or other device; a liquid to be discharged or applied in such a jet.

Conclusion

Applicant's arguments with respect to claims 1-30, 35-37, and 39-41 have been considered but are moot in view of the new ground(s) of rejection.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zeinab EL-Arini whose telephone number is (703)308-3320. The examiner can normally be reached on Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (703)308-4333. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

ZEE
June 6, 2003

Zeinab El-Arini

**ZEINAB EL-ARINI
PRIMARY EXAMINER**